ABSTRACT

An anti-siphon shunt device is provided that is insensitive to body postural changes. The shunt device has a housing having a chamber, an inlet port, and an outlet port. A valve mechanism disposed within the housing manages fluid movement into and out of the chamber over a pressure gradient. The valve mechanism includes a blocking element configured to seat against an opening in a barrier mounted within the chamber for preventing fluid flow therethrough. A pressure sensor having a conformable membrane detects the external pressure surrounding the chamber and communicates with a biasing element to exert a biasing force against a first surface of the blocking element, while a second surface of the blocking element is acted upon by a countervailing pressure in a direction opposite the biasing force. The conformable membrane can be enclosed within a housing to protect the device from shutting off when a patient inadvertently lies on the valve mechanism.